IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Art Unit 2131
Rhoads et al. Confirmation No. 5497

Application No.: 09/531,076

Filed: March 18, 2000

For: SYSTEM FOR LINKING FROM OBJECTS TO REMOTE RESOURCES

VIA ELECTRONIC FILING

Examiner: S. Zia

Date: September 12, 2006

PRE-APPEAL BRIEF REQUEST FOR REVIEW

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants request review of the appealed-from rejection in the above-identified application. No amendment is being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheets. (No more than five attached pages are provided.)

Respectfully submitted,
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REASONS FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

The Board will reverse the Examiner. A few reasons for reversal are noted below.

Claims 28 and 31 stand rejected under § 112, first paragraph. The Action alleges that the claim term "a bound volume" is not described in the specification.

This term is supported by the specification's reference to books and magazines (see, e.g., page 3, line 2) – both of which are "bound volumes."

Before particular consideration of the art-based rejections (all claims are similarly rejected: over Hudetz (5,978,773) in view of Philyaw (6,337,986)), background information is provided for the panel's review:

The present invention relates to linking from objects to associated remote resources.[1] ("Objects" include magazines and other printed media,[2] together with electronic media.[3] "Remote resources" include web pages and other sources of online data.[4])

This basic field has old antecedents. A rudimentary example is a grocery scanner, which reads a barcode from a can of vegetables, and looks-up (links to) an associated price record in an electronic database.

The present assignee markets a technology under the trademark MediaBridge (originally termed "Bedoop") in which digital watermarks are used to mark the objects.[5] Watermarks are desirable for a number of reasons, including their applicability to both physical and electronic objects, and their human imperceptibility (e.g., digital watermarks don't require the dedicated "real estate" of a bar code, and don't interrupt the visual aesthetic of a printed design with a stark black and white data symbology).

The assignee's MediaBridge technology finds numerous applications.[6] One is linking

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1 *See, e.g.*, specification, page 1, lines 16-17.

2 *See, e.g.*, specification, page 1, line 26; page 4, lines 4-5.

3 *See, e.g.*, specification, page 4, lines 1-3; page 31, lines 1-19.

4 *See, e.g.*, specification, page 1, line 30.

5 *See, e.g.*, incorporated-by-reference application 60/164,619 at page 1, lines 3-6.

6 Many of these applications are detailed in commonly-owned applications incorporated-by-reference in the present specification. *See, e.g.*, application 09/343,104, cited at page 1, line 7, and incorporated-by-reference

from printed magazine page (or newspaper pages, catalog pages, etc.) to associated internet web pages,[7] e.g., through use of a camera- and browser-equipped cell phone.[8] Thus, a consumer can show a magazine picture of a vacation resort to the cell phone, and the cell phone can respond by loading the web page of the depicted resort.

Although powerfully versatile, digital watermarks present some particular challenges. One is that imperceptibility of the watermark lessens with longer payloads. Accordingly, it is desirable to keep the encoded data payload small to keep the watermark imperceptible. Instead of encoding a lengthy URL as a watermark payload (such as http://marriott.com/property/propertyPage.mi?marshaCode=HNLMC for the Waikoloa Marriot), it is generally preferable to encode a short identifier (such as 97AE2B) instead. When decoded, this identifier can be passed to a remote server and used as an index to look-up the corresponding (lengthy) URL in a database. This URL is then returned to the browser of the originating device (e.g., cell phone) for linking purposes.[9]

To be commercially successful, the time between the moment the cell phone captures the image data, and the moment the corresponding web page is finally loaded, should be as short as possible. (This is sometimes termed "response latency.") In cases where the watermark payload is an indexing identifier rather than a URL, response latency is largely dependent on the time required to (1) transmit the decoded identifier to the remote server, (2) look-up the corresponding URL in the remote database; and (3) transmit the corresponding URL back to the originating cell phone.

In accordance with one aspect of the present invention, response latency is improved by anticipating an object that may be presented for decoding in the future, based on an object presented in the past. URL information for the anticipated object can then be provided to the cell phone from the database, and cached locally in the phone – eliminating the need for the above-described communications if the anticipated item is, indeed, presented.[10]

Consider, for example, a magazine containing watermarked advertising. If the user presents an advertisement to the cell phone, the watermark is decoded and forwarded to the

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at page 43, lines 13-15.

7 *See, e.g.*, specification, page 1, line 25 through page 2, line 4.

8 *See, e.g.*, specification, page 3, lines 27.

9 *See, e.g.*, specification, page 5, lines 21-24.

10 *See, e.g.*, specification, page 19, lines 27-30.

remote server database, which responds with a URL corresponding to that particular ad. The cell phone browser then initiates a link to that internet address. *Now the remote server knows what magazine the user is reading.* By reference to the watermark first received, the remote server may discern, for example, that the user is reading the San Francisco edition of the March 14, 2000, *Time* magazine, and just looked at page 85. Based on this information the remote server can anticipate that the user may soon present other advertisements known to be found in the same issue. The server can then query the database for URLs associated with other advertising in that issue. These URLs are passed back to the cell phone. If the user next presents an advertisement from page 110 to the phone, the phone finds it already has the corresponding URL locally cached. The phone's browser initiates the link immediately, obviating a data round trip between the application and the remote system.[11]

This arrangement can be optimized in a variety of ways. One is to first send URLs corresponding to pages that are next-expected to be encountered. For example, if the user just presented page 85 to the phone, after sending a URL corresponding to that page, the remote server could next send the URLs associated with pages 86, 87, etc. On sending the URL for the last page of the magazine (typically the rear cover), the handler could start from the beginning (typically the front cover) and send further URLs up to that for page 84. Another approach is to first cache URLs for the most conspicuous ads, e.g., first send URLs for any 2-page spread ads, then for each full page add, then for each successively smaller fractional-page ad. Still another approach is for the remote server to dispatch URLs to the phone for caching in accordance with a contractually-agreed priority. One advertiser, for example, may pay a premium ad rate in exchanged for being cached before other advertisers who don't pay the premium. Other caching priorities, and combinations of such priorities, can naturally be employed.[12]

Through use of systems according to this aspect of the invention, response latency is decreased, and consumer satisfaction is enhanced.

None of the art teaches or suggests such an arrangement. Consider claim 17, which addresses this arrangement as follows:

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[11] *See, e.g.*, specification, page 20, lines 1-16.

[12] *See, e.g.*, specification, page 20, lines 17-29.

> *17. In a method of linking from physical objects to corresponding electronic resources, the method including decoding object payload data from a machine readable feature associated with a physical object, querying a database with at least some of said payload data to obtain address information associated with said physical object, and initiating an electronic link based on said obtained address information,* ***an improvement comprising foreseeing information about object payloads that may be forthcoming but that do not share with the first object the payload data with which the database was queried, and anticipatorily sending address information associated with such foreseen object payloads.***

The Office contends that Hudetz teaches the improvement clause of this Jepson claim by Fig. 4; col. 8, line 47-63; and col. 9, lines 5-21.

Not so. Hudetz's arrangement is different. His specification teaches that the system returns *all* table entries (Fig. 4) having UPC data "that match the product identification number entered by the user."[13] If the user enters just part of the product identification number (e.g., the manufacturer portion), then several URLs are returned. *However, all the returned URLs share the same data with which the table was queried.*[14] This is contrary to the claimed arrangement.

The Board will recognize that the art – even if combined – cannot yield the claimed arrangement. Thus, this rejection will be reversed.

Consider, likewise, claim 24. It requires "*foreseeing information about object payloads that may be forthcoming, and anticipatorily sending address information associated with such foreseen object payloads after initiating said electronic link.*"

Hudetz does not contain any disclosure about 'foreseeing" information about object payloads that may be forthcoming, and sending associated address information. Rather, he teaches returning *several* URLs that are associated with a *single* object identifier. No "forthcoming" payloads are contemplated.

Moreover, Hudetz sends all the matching URLs in a single HTML document.[15] The claim, in contrast, requires obtaining address information associated with a document and

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[13] Hudetz, 5,978,773, col. 8, lines 48-49.

[14] Hudetz, 5,978,773, col. 8, lines 53-64. In this example, the user enters the identification number "31251," so plural records 62, 64 and 54 are returned to the user – since each of these records contains "31251."

[15] Hudetz, 5,978,773, col. 8, lines 49-50.

initiating a link based thereon, *and after a link has been initiated,* sending further address information.

Again, Hudetz does not teach that for which it has been cited. The Board will reverse.

Consider, likewise, claim 30, which requires "*foreseeing information about object payloads that may be forthcoming, and the order in which said other object payloads may be forthcoming*." The method then requires anticipatorily sending address information associated with such object payload, *in such order*.

Again, contrary to the Action, Hudetz has no relevant teaching. Again, the Board will reverse.

For brevity's sake, the foregoing discussion has noted only certain of the claims pending in the application, and only selected points have been reviewed in connection with each. Many other points that might have been raised concerning the claims, the art, and the rejections, have not been belabored.

Nonetheless, the foregoing brief observations are believed sufficient to establish that the outstanding rejections would not be sustained by the Board.